

## **AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

### **Listing of Claims:**

1. (Currently Amended) A transparent, luminescent plastic glass which ~~contains~~ comprises luminescent nanoparticles.
2. (Currently Amended) The plastic glass as claimed in claim 1, ~~characterized in that~~ wherein the nanoparticles are selected from luminescent materials (luminescent pigments) and/or luminescent materials doped with transition metals and/or lanthanides.
3. (Currently Amended) The plastic glass as claimed in claim 1, wherein ~~or 2,~~ ~~characterized in that~~ the nanoparticles in the glasses are ~~preferably~~ present in an amount of from 0.1 to 20% by weight, based on the ~~amount of polymer~~ weight of the glass.
4. (Currently Amended) The plastic glass as claimed in ~~either of claims 2 and 3,~~ ~~characterized in that~~ claim 2, wherein the luminescent material is selected from the group consisting of Y<sub>2</sub>O<sub>3</sub>, YVO<sub>4</sub>, Zn<sub>2</sub>SiO<sub>4</sub>, CaWO<sub>4</sub>, MgSiO<sub>3</sub>, BaF<sub>2</sub>, SrAl<sub>2</sub>O<sub>4</sub>, ZnO, ZnS, Gd<sub>2</sub>O<sub>3</sub>S, La<sub>2</sub>O<sub>2</sub>S, BaFC<sub>1</sub>, LaOBr, Ca<sub>10</sub>(PO<sub>4</sub>)<sub>6</sub>(F, Cl)<sub>2</sub>, BaMg<sub>2</sub>Al<sub>6</sub>O<sub>27</sub>, CeMgAl<sub>11</sub>O<sub>19</sub>, ZnSe or CdS and any desired mixtures of the above.
5. (Currently Amended) The plastic glass as claimed in claim 4, ~~characterized in that~~ wherein the luminescent material is selected from the group consisting of ZnS and ZnO.
6. (Currently Amended) The plastic glass as claimed in claim 4, wherein ~~or 5,~~ ~~characterized in that~~ the luminescent material is doped with Al, transition metals, ~~such as~~ Cu, Ag or Mn, or rare earth metals, ~~such as~~ Eu or Yb.

7. (Currently Amended) The plastic glass as claimed in ~~any of claims~~ claim 1, wherein to 6, ~~characterized in that~~ the plastic is a polymer or polymer blend selected from the group consisting of polyacrylates and derivatives thereof, polymethacrylates, polycarbonates, polystyrenes, epoxides, polyethylene terephthalates, ethylene-norbornene copolymers and any desired copolymers of the corresponding monomers.

8. (Currently Amended) A method for producing a transparent, luminescent plastic glass, ~~characterized in that~~ comprising mixing one or more luminescent materials ~~are~~ mixed with a polymer precursor or a solution of the polymer precursor in a first stage of the method to obtain a mixture and the mixture obtained is polymerized ~~in a manner known per se~~ in a second stage of the method.

9. (Currently Amended) The method as claimed in claim 8, ~~characterized in that~~ wherein the luminescent materials are obtained by a precipitation reaction from an alcoholic solution.

10. (Currently Amended) The method as claimed in claim 8, wherein or 9, ~~characterized in that~~ the luminescent materials are dispersed in the polymer precursor or a portion thereof or a solution of the polymer precursor or a portion thereof.

11. (Currently Amended) The method as claimed in ~~any of claims~~ claim 8, wherein to 10, ~~characterized in that~~ the polymer precursor is selected from the group consisting of monomers or polymerizable oligopolymers which are liquid at processing temperature or are soluble in a solvent.

12. (Currently Amended) The method as claimed in ~~any of claims~~ claim 8, wherein to 11, ~~characterized in that~~ the luminescent materials are present in the mixture with the polymer in a particle size of less than 100 nm.

13. (Currently Amended) The method as claimed in any of claims claim 8, wherein  
~~to 12, characterized in that~~ the plastic glass has the shape of a film or an article.

14. (Currently Amended) An illuminating element or luminescent comprising the  
plastic glass The use of the transparent, luminescent plastic glasses as claimed in any of  
claims claim 1 to 7 for producing illuminating elements, luminescent displays, including  
inscriptions on objects, such as glasses, for marking plastics, etc.

15. (Currently Amended) A coating comprising the plastic glass The use of the  
~~transparent, luminescent plastic glasses as claimed in any of claims~~ claim 1 to 7 for  
producing coatings on inorganic or organic glasses.